



Lessons from EPA's Environmental Epidemiologic Studies

**Rebecca L. Calderon
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DECIDING TO DO A STUDY

Meeting an Agency need

Regulations

Regional Request

Moving the state of the science (high risk)

Unique capability

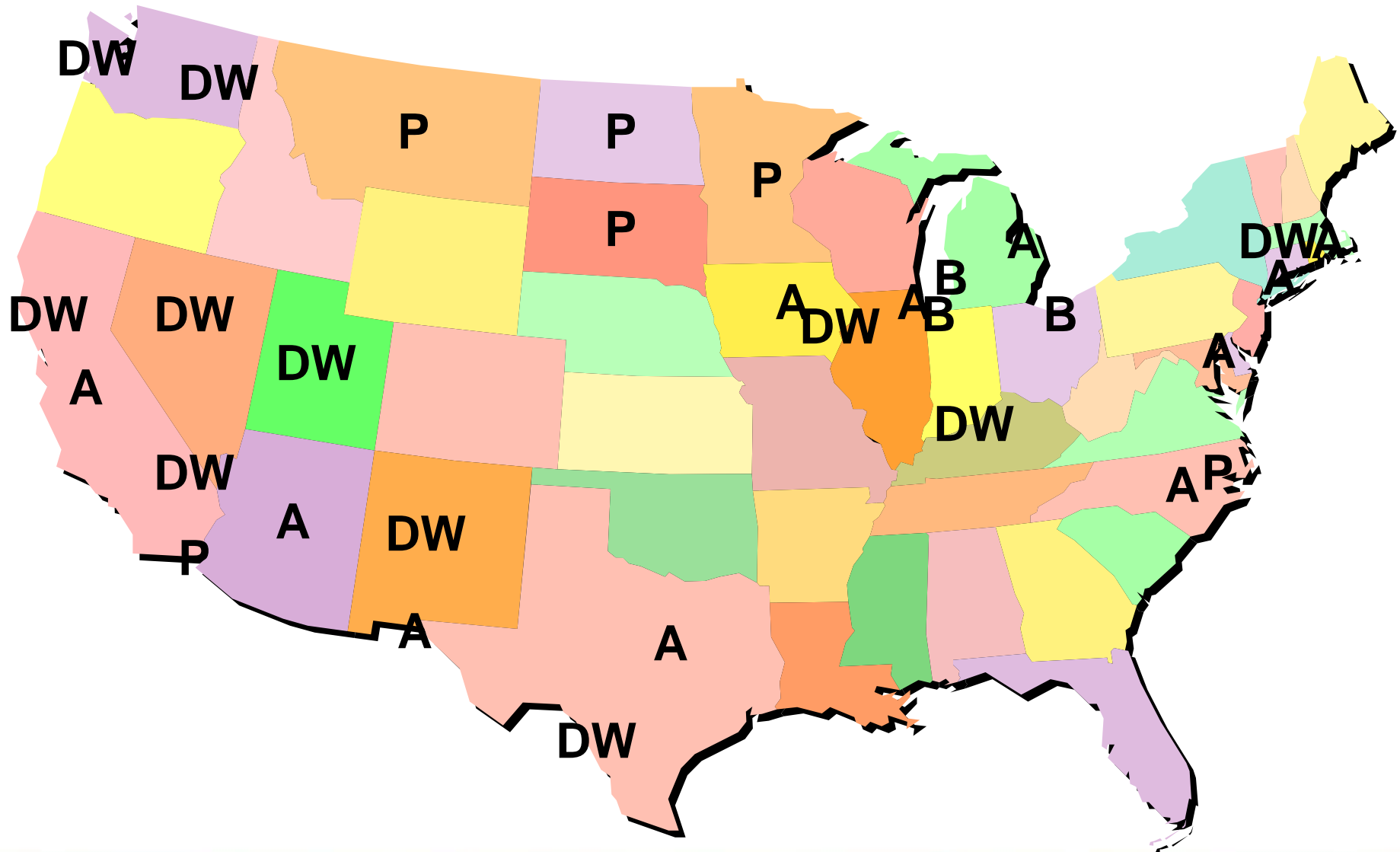
Congressional Mandate

Investigator Initiated

Public Health Importance



A=air, DW= drinking water, B=beaches, P=pesticides



RESEARCH & DEVELOPMENT

Building a scientific foundation for sound environmental decisions

	Air	Drinking Water	Water Quality	Pesticides
Elderly	X	X	X	X
Children	X	X	X	X
Poor		X		X
Race	X	X	X	
Ethnic	X	X	X	X



KEY AREAS FOR INVOLVEMENT

Study Design

Study Implementation

Study Conduct

Study Analysis

Study Communication



STUDY DESIGN

Site Selection

geography, population density, demographics

Study Population

sampling vs volunteering vs targeted

Study Design

Subject Burden



STUDY IMPLEMENTATION

Participant Recruitment

locals vs professionals

Subject Confidentiality

Home vs Clinic vs Study Site

Schools, Beaches

Language Considerations

Special Needs Population



STUDY CONDUCT

Participant Experience

Participant Support



Data Quality

Protocol Flexibility



STUDY ANALYSIS

Key Questions

Hypotheses driven

Discovery science

Science vs society

Post hoc syndrome

WHY DIDN'T YOU DO _____?



STUDY COMMUNICATION

Study subjects

Community

Local and State health officials

EPA regional office

EPA program office

Scientific community



STUDY COMMUNICATION

Uncertainty

No risk

Exposures, no effects

Effects, no exposure

**Individual results that have
unknown meaning**

**Specimen banking – conducting
tests in the future**

Obligation in future

